

Jour. Bot. 34: 307-311. 1896), we have here additional evidence that Pursh's Flora was issued at the *very beginning* of the year 1814. No case has come to my notice in which the question of the respective dates of Rees' Cyclopaedia and Pursh's Flora complicates synonymy.

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THE FERNS OF NORTHERN CAPE BRETON

By C. B. ROBINSON

The fern flora of the peninsula of Nova Scotia is of the same general character as that of New England, differing mainly in the absence of about one third of the species found in the latter. Only one additional form appears, the rare *Schizaea pusilla* Pursh, collected but once, at Grand Lake, near Halifax, by Mrs. Britton.

In view of this, it is worthy of remark that in the northern part of the island of Cape Breton there are two species, one of them widely distributed, which have never been reported from the peninsula, and several others which occur there but rarely.

Northern Cape Breton is a country of great natural beauty. Near both eastern and western coasts are ranges of hills, usually from eight to fourteen hundred feet in height, intersected by numerous brooks and river valleys. Except for these, much of the interior is a high table-land, at the extreme north often peat-bog. The flora though destitute of alpine forms is of great interest, many flowering plants also growing here which are either rarer or missing in the rest of the province.

Ferns grow here luxuriantly and in considerable variety. The three Osmundas reach the extreme north and twenty-six species and two varieties of Polypodiaceæ are with few exceptions very widely distributed.

Dryopteris Filix-mas (L.) Schott, which has aroused the most interest among Canadian botanists, is not found at all on the peninsula or in eastern New Brunswick. In Cape Breton it was first discovered upon Salt Mountain, Whycocomagh, by Dr. A. W. H. Lindsay, and subsequently at Aspy Bay, Lake Ainslie.

and Cape Mabou, by Dr. A. H. MacKay. Further investigation shows that its distribution in this region is very wide, though as a rule only a few plants are found at any one place. It has been gathered in three localities a few miles apart along Bay St. Lawrence, which bounds the island on the north, and beside the road leading thence to Aspy Bay. South of the latter the land is very rocky and barren and it is not found, but reappears at Clyburn Brook, Ingonish, the next bay to the south.

Search for it at Cheticamp and Margaree, on the west coast, proved unsuccessful, but it is abundant beside the beautiful lakes at Luggelaw, on the road thence to Baddeck. In the Mabou district, besides Dr. MacKay's station, it grows at the Coal Mines, at Glenora Falls, and on Glencoe Mountain nearly half way to the lakes. It probably extends still farther to the south.

A much rarer fern, not otherwise known in the maritime provinces, is *Polystichum Lonchitis* (L.) Roth, found by Dr. MacKay at Aspy Bay, and by the writer along the roadside near the top of Glencoe Mountain. Near it was *Asplenium viride* Huds., not yet found elsewhere in Cape Breton, and at only one place in Nova Scotia proper.

Polystichum Braunii (Spenner) Fée, local on the mainland, is here very abundant throughout the hill district, and in the north becomes a splendid plant with fronds often exceeding four feet in height.

Two plants, one fruiting, of *Woodsia glabella* R. Br. were found by N. D. MacTavish and the writer, on a rock near the summit of a hill 1,300 feet high at Cheticamp, while beside a brook at the base was a solitary specimen of *Filix bulbifera* (L.) Underw. Both species are decidedly rare elsewhere in the province.

The following also are found north of the Lakes, with hardly an exception, in great abundance: *Polypodium vulgare* L., *Pteridium aquilinum* (L.) Kuhn, *Asplenium acrostichoides* Sw., *A. Filix-foemina* (L.) Bernh., *Polystichum acrostichoides* (Michx.) Schott, *Dryopteris Noëboracensis* (L.) A. Gray, *D. Thelypteris* (L.) A. Gray, *D. cristata* (L.) A. Gray, *D. marginalis* (L.) A. Gray, *D. spinulosa* (Retz) Kuntze, *Phegopteris Phegopteris* (L.) Underw.,

P. Dryopteris (L.) Fée, *Filix fragilis* (L.) Underw., *Woodsia Ilvensis* (L.) R. Br., *Dennstaedtia punctilobula* (Michx.) Moore, *Matteuccia Struthiopteris* (L.) Todaro, and *Onoclea sensibilis* L.

South of the Lakes no additional species are known, unless an unverified report of *Adiantum pedatum* L. should prove correct. The Maiden-hair is one of the greatest rarities in Nova Scotia, hence the scepticism. The most promising district in the south-east is believed to be still unexplored by a botanist.

Woodwardia Virginica (L.) J. E. Smith, *Asplenium Trichomanes* L., *Dryopteris fragrans* (L.) Schott, *D. Bootii* (Tuckerm.) Underw., and *Woodsia obtusa* (Spreng.) Torr., all found in Nova Scotia, though rare, have not yet been collected in Cape Breton, in spite of the fact that two of them reach the western side of the Strait.

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THE TYPE-LOCALITY OF ARENARIA BREVIFOLIA

BY ROLAND M. HARPER

Arenaria brevifolia,* "the rarest of our eastern American Arenarias," † was for many years known only from the granite region of Middle Georgia, particularly on and around Stone Mountain, where it was collected by Canby in 1869 and by several other botanists in later years. (It has since been found in Rowan County, North Carolina, by Heller and Small, in Lee County, Alabama, by Professor Earle, and in DeKalb County, Alabama, by Dr. Mohr. At the last-named station it grew on Carboniferous sandstone, but at all the others its habitat is on granite.) It was natural to suppose, therefore, that the original specimens were collected by Nuttall somewhere in Middle Georgia, though not on Stone Mountain, which seems to have been unknown in Nuttall's time.

* *Arenaria brevifolia* Nutt. ; T. & G. Fl. N. A. 1 : 180. 1838.

Alsine brevifolia Chapm. Fl. S. States, 49. 1860.

Alsineopsis brevifolia Small, Fl. S. E. States, 420. 1903.

† Small, Bull. Torrey Club, 24 : 332. 1897.